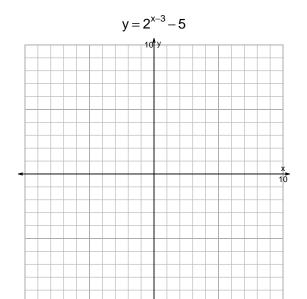
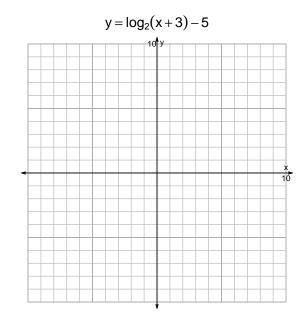
s18quiz: EXP LOG (QUIZ v208)

1. Graph $y=2^{x-3}-5$ and $y=\log_2(x+3)-5$ on the grids below. Also, draw any asymptotes with dotted lines.

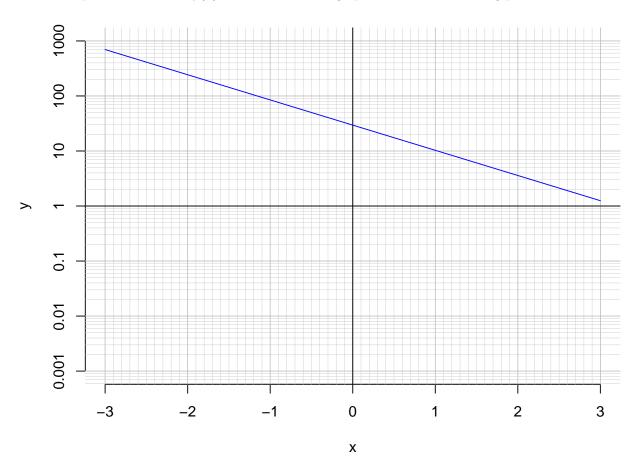




2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$23 = \left(\frac{3}{5}\right) \cdot 2^{-4t/7}$$

3. An exponential function $f(x) = 29.5 \cdot e^{-1.05x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(-0.5).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(300)$.